during or after applying said second voltage, applying a third voltage to an address electrode to select said display cell.

24. (AS NEW HEREIN) A method of driving a plasma display device in which a first voltage is applied between sustain discharge electrodes so as to perform a discharge in a display cell, comprising

applying a second voltage of a voltage level twice that of a power supply voltage level, to generate a pulse for sustain discharge, to at least one of said sustain discharge electrodes, as a final pulse producing a sustain discharge between said sustain discharge electrodes; and

during or after applying said second voltage, applying a third voltage to an address electrode to select said display cell.

REMARKS

In accordance with the foregoing, amendments have been made to original claims 16 and 17 to improve form and new claims 18-24 are added, independent claims 18, 23, 24 corresponding to original claims 1, 6, and 11 but differing and form and affording a varying scope of protection in relation to those corresponding originally filed claims.

No new matter is presented and, accordingly, approval and entry of the amended and new claims are respectfully requested.

STATUS OF CLAIMS

Item 2 of the Action at page 2 rejects all of the originally pending claims 1-17 for anticipation under 35 USC § 102(e) be Setoguchi et al. (USP 6,084,558)--which, as the Examiner notes, was submitted by applicants in an IDS and, moreover, is assigned to the common assignee herewith.

The rejection is respectfully traversed.

Setoguchi et al. discloses a method of driving a plasma display device comprising a charge adjustment step so as to adjust at least one of the polarity and magnitude of a wall charge, accumulated due to discharge occurring at an addressing step.

The Examiner contends, on the other hand, that Setoguchi et al. discloses a removal step as disclosed and claimed in the present application, by mere reference to the Abstract of

Setoguchi et al. and thus without pointing out any specific example. However, the abstract of Setoguchi et al. does not suggest at all the removal step of removing wall charges formed on an address electrode by a sustain discharge as in the present invention, nor does any of the detailed specification or drawings of Setoguchi et al. providing any such teaching.

The Examiner is referred to the discussion of the addressing period (col. 7, lines 43 et seq.) and, in more detail, the first-half addressing period and the second half addressing period discussion (col. 7, lines 60 et seq. and col. 8, line 18 et seq.) in Setoguchi et al., at none of which is there any discussion of wall charges being formed on an address electrode by a sustain discharge performed between sustain discharge electrodes, as set forth in independent claim 1.

Moreover, there is no discussion in the reference of the more specific application of a second voltage having a voltage level relative to a power supply voltage level to generate a pulse for sustain discharge, followed by applying a third voltage all as set forth in independent claim 6 and similarly in independent claim 11. Independent claims 16 and 17, as well, distinguish over Setoguchi et al. in relation to the recitations of second and third voltages and otherwise in correspondence to the recitations of independent claim 1.

Dependent claims 2/1 and 19/18 furthermore recite a self-erase discharge as the mechanism by which wall charges accumulated on the address electrodes are removed.

The Examiner furthermore is referred to the specification of the present application which clearly teaches the function of wall charges which are formed on the address electrode as a result of sustain discharges between sustain discharge electrodes being "reliably removed" (see, e.g., page 32, the last line of the first paragraph, page 37, the sixth line of the second full paragraph and page 40, the last three lines of the partial first paragraph and again the third line of the first full paragraph and the fourth and fifth lines of the last paragraph). (The function of self-erase discharge is disclosed throughout the specification (see, e.g., page 6, line 12, page 25, line 4, page 30, line 17, page 32, lines 7 and 12 , page 36, lines 25-26, page 37, lines 2-3, page 39, lines 23-24, and 40, lines 3 and 9).

CONCLUSION

It is respectfully submitted that there is no basis whatsoever to suggest that Setoguchi et al. discloses the claimed subject matter of claims pending herein either on grounds of

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anticipation or on grounds of obviousness under 35 USC §§ 102(e) and 103, respectively.

There being no other objections or rejections, it is submitted that the application is in condition for allowance, which action is earnestly solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: May 30, 2003

By: _____
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CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231

on May 30, 2003

STAAS & HALSEY

By: _____

Date: _____

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please AMEND the following claims:

1. (AS UNAMENDED) A method of driving a plasma display device applying a first voltage between sustain discharge electrodes so as to perform discharge in a display cell, comprising:

a removal step of removing wall charges formed, by sustain discharge performed between said sustain discharge electrodes, on an address electrode for selecting said display cell.

2. (AS UNAMENDED) The method according to claim 1, wherein

said removal step comprises a wall charge formation step of applying a second voltage to at least one of said sustain discharge electrodes and a self-erase step of applying a third voltage to said address electrode, and

said second voltage is a voltage for forming, on said address electrode by sustain discharge performed between said sustain discharge electrodes, wall charges capable of self-erase discharge performed between said address electrode and at least one of said sustain discharge electrodes in said self-erase step.

3. (AS UNAMENDED) The method according to claim 2, wherein said wall charge formation step, said second voltage is applied to one of said sustain discharge electrodes, and the other electrode is set at ground level.

4. (AS UNAMENDED) The method according to claim 2, wherein said wall charge formation step, said second voltage is applied to one of said sustain discharge electrodes, and then said second voltage is applied to the other electrode.

5. (AS UNAMENDED) The method according to claim 1, wherein said removal step is arranged between subfields each comprising a reset step, a address step, a sustain discharge step.

6. (AS UNAMENDED) A method of driving a plasma display device applying a first

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voltage between sustain discharge electrodes so as to perform discharge in a display cell, wherein

after sustain discharge is performed between said sustain discharge electrodes, a second voltage that is a voltage twice a power supply voltage for generating a pulse for sustain discharge is applied to at least one of said sustain discharge electrodes, and during or after applying said second voltage, a third voltage is applied to an address electrode for selecting said display cell.

7. (AS UNAMENDED) The method according to claim 6, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the X-electrode.

8. (AS UNAMENDED) The method according to claim 6, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the Y-electrode.

9. (AS UNAMENDED) The method according to claim 6, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the Y-electrode, and then, said second voltage is applied to the X-electrode.

10. (AS UNAMENDED) The method according to claim 6, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the X-electrode, and then, said second voltage is applied to the Y-electrode.

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11. (AS UNAMENDED) A method of driving a plasma display device applying a first voltage between sustain discharge electrodes so as to perform discharge in a display cell, wherein

a second voltage that is a voltage twice a power supply voltage for generating a pulse for sustain discharge is applied to at least one of said sustain discharge electrodes as a final pulse for sustain discharge performed between said sustain discharge electrodes, and during or after applying said second voltage, a third voltage is applied to an address electrode for selecting said display cell.

12. (AS UNAMENDED) The method according to claim 11, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the X-electrode.

13. (AS UNAMENDED) The method according to claim 11, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the Y-electrode.

14. (AS UNAMENDED) The method according to claim 11, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

said second voltage is applied to the Y-electrode, and then, said second voltage is applied to the X-electrode.

15. (AS UNAMENDED) The method according to claim 11, wherein

said sustain discharge electrodes comprise X-electrodes which are driven by sustain discharge pulse simultaneously, and Y-electrodes which are driven by sustain discharge pulse simultaneously and driven by scanning pulse separately, and

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said second voltage is applied to the X-electrode, and then, said second voltage is applied to the Y-electrode.

16. (ONCE AMENDED) A plasma display device applying a first voltage between sustain discharge electrodes so as to perform discharge in a display cell, comprising:

a control circuit [for] applying a second voltage to at least one of said sustain discharge electrodes and applying a third voltage to an address electrode for selecting said display cell,

wherein said second voltage is a voltage [for forming] which forms, on said address electrode by sustain discharge performed between the sustain discharge electrodes, wall charges capable of self-erase discharge [performed] between said address electrode and at least one of said sustain discharge electrodes by said third voltage.

17. (ONCE AMENDED) A plasma display device applying a first voltage between sustain discharge electrodes so as to perform discharge in a display cell, comprising:

a control circuit [for], after a sustain discharge is performed between said sustain discharge electrodes, applying a second voltage, of a level [that is a voltage] twice a level of a power supply voltage, which generates [for generating] a pulse [for] producing a sustain discharge, to at least one of said sustain discharge electrodes, and during or after applying said second voltage, applying a third voltage to an address electrode for selecting said display cell.

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after a sustain discharge between said sustain discharge electrodes, applying a second voltage, of a voltage level twice that of a power supply voltage level, to generate a pulse for sustain discharge applied to at least one of said sustain discharge electrodes; and

during or after applying said second voltage, applying a third voltage to an address electrode to select said display cell.

24. (NEW) A method of driving a plasma display device in which a first voltage is applied between sustain discharge electrodes so as to perform a discharge in a display cell, comprising

applying a second voltage of a voltage level twice that of a power supply voltage level, to generate a pulse for sustain discharge, to at least one of said sustain discharge electrodes, as a final pulse producing a sustain discharge between said sustain discharge electrodes; and

during or after applying said second voltage, applying a third voltage to an address electrode to select said display cell.

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